REMARKS

Claims 1, 6, 13, 15, 16, 21, 28, and 30 have been amended.

Claims 1 – 30 are present in the subject application.

In the Office Action dated May 25, 2005, the Examiner has indicated that claims 6, 7, 9, 12 – 15, 21, 22, 24, and 27 – 30 contain patentable subject matter and has rejected claims 1 – 5, 8, 10, 11, 16 – 20, 23, 25, and 26 under 35 U.S.C. §103(a). Favorable reconsideration of the subject application is respectfully requested in view of the following remarks.

Initially, applicants submit herewith a minor correction to Figure 7. In particular, original reference numeral 100 has been changed to reference numeral 102, while original reference numeral 102 has been changed to reference numeral 100. Support for this modification may be found throughout the specification (e.g. See Page 8, lines 7 – 19). A replacement drawing sheet and corresponding copy of the figure with changes indicated thereon in red ink is submitted herewith.

The Examiner has objected to claims 6, 7, 9, 12 – 15, 21, 22, 24, and 27 – 30 as being dependent upon a rejected base claim. The Examiner further indicated that these claims would be allowable if rewritten in independent form. Accordingly, claims 13, 15, 28, and 30 have been rewritten in independent form and are considered to be in condition for allowance.

The Examiner has rejected claims 1 – 5, 8, 10, 11, 16 – 20, 23, 25, and 26 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,102,709 (Howard et al.) in view of U.S. Patent No. 5,311,408 (Ferchau et al.). Briefly, the present invention is directed toward coupling microwave signals from a microwave module to a microstrip transmission line, each installed on a chassis plate. The microwave signals are fed through the bottom or side of the microwave module using a feedthrough pin mounted in the module. The feedthrough pin extends from the microwave module interior into a channel defined in the chassis plate and to a microstrip line on the opposite side of the

plate. An electrically conductive gasket is placed about the feedthrough pin between the microwave module and chassis plate to reduce signal leakage and enhance ground continuity. An insulating sleeve is installed about the feedthrough pin in the chassis plate channel and provides a nominal clearance (e.g., 0.005 inches) within that channel to allow for manufacturing and assembly tolerances and to enable feedthrough impedance to be substantially insensitive to the position of the feedthrough pin and insulating sleeve within the channel.

The Examiner takes the position that the Howard et al. patent discloses all the limitations within these claims except for an electrically conductive gasket placed about the signal conductor and between the microwave module and the support structure. The Examiner further alleges that the Ferchau et al. patent discloses this feature and that it would be obvious to combine the teachings of the Howard et al. and Ferchau et al. patents to attain the claimed invention.

This rejection is respectfully traversed since the combination of the Howard et al. and Ferchau et al. patents does not render the feature of the electrically conductive gasket obvious as discussed below. However, in order to expedite prosecution of the subject application, independent claims 1 and 16 have been amended to recite the features of an insulating sleeve to control impedance variation of a microwave signal path with respect to varying positions of the signal conductor and sleeve within the support structure, wherein a clearance is formed between a sleeve exterior surface and a support structure internal surface to facilitate the varying positions.

The Howard et al. patent does not disclose, teach or suggest these features. Rather, the Howard et al. patent discloses a connector that provides an interconnect between a pin and a flat conductor. The connector employs two bundles fabricated of densely packed gold plated wire for the electrical connection to the devices. The bundles are both housed in a dielectric sleeve structure and are themselves connected by a solid conductor. A portion of one wire bundle protrudes from

one end of the sleeve structure to make electrical contact with a flat conductor in a mating assembly. The second wire bundle is recessed within the sleeve structure adjacent a second end of the sleeve structure. The pin is inserted into the second end in an installation, making electrical contact with the second wire bundle. The outside of the body connector is threaded, allowing an operator to twist the connector into the mating assembly (e.g., See Abstract).

The connector is inserted within upper and lower housing members of an installation with the sleeve contacting installation or housing member surfaces (e.g., See Figs. 3 – 6 and Column 4, lines 15 – 18). Although the receptacles within the lower housing member include oversized, tapered receptacle openings, these openings merely permit insertion and gentle alignment of the connector in the lower housing member during installation. Once the connectors are inserted, the connector sleeve directly engages the lower portions of the lower housing member surfaces to provide a connector position fixed within that housing member (e.g., without a clearance to facilitate varying positions) (See Fig. 6). Thus, there is no disclosure, teaching or suggestion of a clearance formed between the sleeve exterior surface and a support structure internal surface to facilitate varying positions of the signal conductor and sleeve or, for that matter, an insulating sleeve to control impedance variation of a microwave signal path with respect to those varying positions as recited in the independent claims.

The Ferchau et al. patent does not compensate for the deficiencies of the Howard et al. patent and similarly does not disclose, teach, or suggest the above-discussed features within the independent claims. Rather, the Ferchau et al. patent discloses an electronic assembly including an electronic module mounted to a backplane, having a ground plane for grounding and EMI shielding. The Examiner merely utilizes the Ferchau et al. patent for a teaching of a gasket.

Since the Howard et al. and Ferchau et al. patents do not disclose, teach, or suggest, either

alone or in combination, the features recited in independent claims 1 and 16 as discussed above, these claims are considered to be in condition for allowance.

Dependent claims 2 – 12, 14, 17 – 27, and 29 depend, either directly or indirectly from independent claims 1 or 16 and, therefore, include all of the features within their parent claims. The dependent claims are considered to be in condition for allowance for substantially the same reasons discussed above in relation to their parent claims and for further limitations recited in the dependent claims.

In addition to the foregoing, there is no apparent reason or motivation to combine the teachings of the Howard et al. and Ferchau et al. patents to attain the claimed invention. In particular, the Howard et al. patent is directed towards a connector providing an interconnect between a pin and a flat conductor as described above. The Ferchau et al. patent is directed toward an electronic assembly including an electronic module mountable to a backplane for improved grounding and EMI shielding as described above. Thus, the patents are directed toward diverging structures and applications and there is no apparent reason, motivation, or suggestion to combine their teachings absent prohibited hindsight derived from Applicants' own disclosure. Accordingly, the combination of the Howard et al. and Ferchau et al. patents does not render the claimed invention obvious.

The application, having been shown to overcome issues raised in the Office Action, is considered to be in condition for allowance and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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Annotated marked-up Drawings

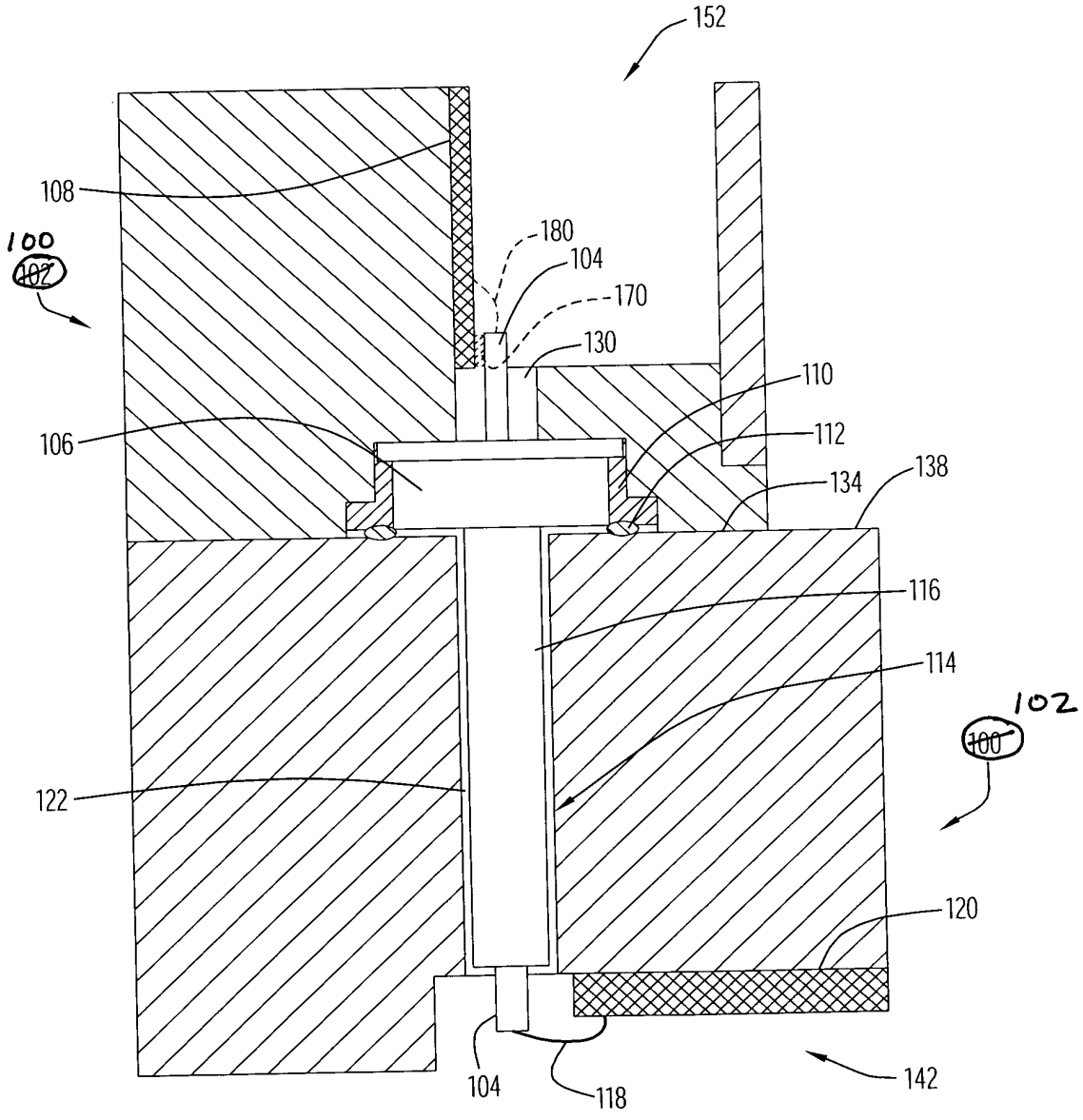

FIG.7